



1600 South Second Street
Mount Vernon, WA 98273-5202
ph 360.428.1617
fax 360.428.1620
www.nwcleanair.org

Air Operating Permit Excess Emissions Report Form Part II

Name of Facility	Shell, Puget Sound Refinery	Reported by	Tim Figgie
Date of notification	April 21, 2014	Incident type: breakdown/ upset/startup or shutdown	Startup
Start Date	April 21, 2014	Start Time:	9:00 PM
End Date	April 21, 2014	End Time:	10:00 PM
Process unit or system(s): Flare			

Incident Description

On April 21, 2014 during startup of the FCCU after the Northside planned maintenance Turnaround a valve was slightly open on a decommissioned line. It is unknown when and why the valve was opened. The valve allowed condensate to enter the FCCU wet gas compressor (WGC) interstage. The condensate was drained to the flare to prevent tripping the WGC. Preventing tripping the WGC was done in order to minimize flaring. The draining of condensate to the flare caused breakthrough and high H2S readings above 162ppm 3-hour rolling average at 9 and 10PM.

Immediate steps taken to limit the duration and/or quantity of excess emissions:

FGR was operating to recovery as much excess flare gas as possible.

Applicable air operating permit term(s): permit terms are not yet defined

Estimated Excess Emissions: Based on online H2S CEMS and fuel gas flow meters	Pollutant(s): SO2	Pounds (Estimate): 21
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The incident was the result of the following (check all that apply):

- ☒ Scheduled equipment startup
- ☐ Scheduled equipment shutdown
- ☐ Poor or inadequate design
- ☐ Careless, poor, or inadequate operation
- ☐ Poor or inadequate maintenance
- ☒ A reasonably preventable condition

Did the facility receive any complaints from the public?

- ☒ No
- ☐ Yes (provide details below)

Did the incident result in the violation of an ambient air quality standard

- ☒ No
- ☐ Yes (provide details below)

PSR0000633

Root and other contributing causes of incident:

The root cause of this event was high flow of hydrocarbon to the flare FGR system during shutdown of the Northside process units in preparation for a planned maintenance turnaround.

The root cause of the incident was:

(The retention of records of all required monitoring data and support information shall be kept for a period of five years from the date of the report as per the WAC regulation (173-401-615))

- ☒ Identified for the first time
☐ Identified as a recurrence (explain previous incident(s) below – provide dates)

Are the emissions from the incident exempted by the NSPS or NESHAP "malfunction" definitions below?

- ☒ No
☐ Yes (describe below)

Definition of NSPS "Malfunction": Any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or failure of a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. 40 CFR 60.2

Definition of NESHAP "Malfunction": Any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. 40 CFR 63.2

Analyses of measures available to reduce likelihood of recurrence (evaluate possible design, operational, and maintenance changes; discuss alternatives, probable effectiveness, and cost; determine if an outside consultant should be retained to assist with analyses):

To prevent a reoccurrence of this event, the decommissioned line has been air gapped.

Description of corrective action to be taken (include commencement and completion dates):

See above

If correction not required, explain basis for conclusion:

See above

Attach Reports, Reference Documents, and Other Backup Material as Necessary. This report satisfies the requirements of both NWCAA regulation 340, 341, 342 and the WAC regulation (173-400-107).

Is the investigation continuing? ☒ No ☐ Yes

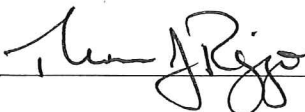
Is the source requesting additional time for completion of the report? ☒ No ☐ Yes

Based upon information and belief formed after reasonable inquiry, I certify that the statements and information in this document and all referenced documents and attachments are true, accurate and complete.

Prepared By: _ James Stellar

Date: ___ Apr 22, 2014

Responsible Official or Designee: _____



Date: 5/28/14